TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.	JOB ORDER NUMBER	APPROP. FY
QSS Group, Inc.	NAS5- 99124 TASK NO. 377 AMENDMENT	691-344-02-57-89 562-049- 59-02 -89	00 00

TASK TITLE: (NTE 80 characters; include Project name)

Radiation Lab Maintenance and Operations

APPROVALS: (Type or print name and sign)

	DATE	ORG CODE	MAIL CODE	PHONE
ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR) Stephen K. Brown SK Brown	9/20/00	562	562	301-286-5795
BRANCH HEAD Darryl Lakins Darryl D Lakins	9/20/00	CODE 562		PHONE 301-286-6382
CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) Robert S. Lebair, Jr.	9/21/00	CODE 560		PHONE 301-286-6588

FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? *(IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)*	CONTRACTING OFFICER'S QUALITY REP.	DESIGNATED FAM:
[X] NO [ ] YES		

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reps and Certs.

(To be completed by Contracting Officer)
C.O. Requested Quote on:
Date:

Contractor will develop specification or statement of work under this task for a future procurement. [X] NO [ ] YES

Flight hardware will be shipped to GSFC for testing prior to final delivery. [X] NO [ ] YES [ ] N/A

Government Furnished Property/Facilities: [ ] NO [X] YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only)

Onsite Performance: [ ] NO [X] YES If yes: [X] TOTAL [ ] PARTIAL
If partial, indicate onsite work in SOW by asterisk (*)

Surveillance Plan Attached: [X] NO [ ] YES

Highlighted Contract Clauses: *(to be completed by Contracting Officer)*

INCENTIVE FEE STRUCTURE (check one)

(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)

	No. 1	No. 2	No. 3	No. 4	x	
Cost	10%	50%	25%	25%	10	%
Schedule	15%	25%	25%	50%	45	%
Technical	75%	25%	50%	25%	45	%

(To be completed by Contracting Officer)

The target cost of this task order is $_____.
The target fee of this task order is $_____.
The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is $_____.

The maximum fee is $_____.
The minimum fee is $0.

AUTHORIZED SIGNATURE:

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

SIGNATURE OF CONTRACTING OFFICER | DATE | TYPED NAME OF CONTRACTING OFFICER

CONTRACTOR'S ACCEPTANCE:

AUTHORIZED SIGNATURE | DATE

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

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REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO. / TASK NO.		
	NAS5-	TASK NO.	AMENDMENT
QSS Group, Inc.	99124	377	

Applicable paragraphs from contract Statement of Work:

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

See Page 3.

PERFORMANCE SPECIFICATIONS:

See Page 6.

APPLICABLE DOCUMENTS:

GHB 1860.1
Title 10 Code of Federal Regulations Part 36 (10CFR36), Panoramic Irradiators
ISO9003: Radiation Control Procedures (Unisys) RA000, RA001-025.
GSFC WI 8700.1, GPG-8730.1, 562-PG-8700, 562-PG-8730, 562-PG-1310

TASK END DATE: 9/30/01

MILESTONES/DELIVERABLES AND DATES:

See Page 5.

PERFORMANCE STANDARDS:

Schedule: On-time delivery/completion of the deliverables/milestones
Technical: ATR's acceptance of the above

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):
S. K. Brown, building 22, room G70C

Task#: 377

STATEMENT OF WORK

The contractor shall operate and maintain the facility systems and equipment items in the on-site Radiation Effects Facility.

Tasks Associated with the Radiation Effects Facility

Operation of the Facility:

1. Provide NRC certified operators and required back up operators, engineering and technician support;

2. Provide scheduling, operations, test procedures, test hardware, maintenance, calibration and repair;

3. Maintain ISO 9000 files and records for test procedures and test records.

4. Insure Nuclear Regulatory Commission regulation compliance: maintains required NRC files; conducts NRC required reviews, operator re-certification, procedures, testing and maintenance.

5. Provide for GSFC Safety Requirements: provides 2 designated Safety Officers; maintains required chemical records and overall safety procedures.
6. Provide Md. State Compliance (Radiation and Chem.)
7. Maintain Radiation Lab Equipment. The equipment includes but is not limited to the following:

    - Van De Graaff, Two-2 Mev particle accelerators: two in use; one low and one medium beam current. Both machines are capable of producing negative (electron) or positive (positive ion) beams. The low-current accelerator is used for particle detector calibration; the medium-current accelerator is used for radiation testing and simulation of space radiation effects.

    - Extremely Low-Current Particle Accelerator (150 KeV) - This machine is used for calibration of extremely sensitive particle detectors for astrophysics instruments and other scientific investigations.

- Cobalt 60 Gamma-Ray Irradiator (approx. 400 KCurie.) - This source is located in a 20 x 20 x 20 - foot shielded room and is used principally for radiation testing of electronic parts. Plans are to add two more High intensity sources, 44KC and 6KC.

- Dosimetry Equipment such as FW7 Radiochromic Film Dosimeter (traceable to National Institute of Standards and Technology (NIST); Thermal Luminescent Device Dosimetry System; Victoreen Ionization Probe System.

- Microscopes, for visual inspection of integrated circuits during removal of device covers, for irradiation, and inspection of small parts during testing or repair.

- Various general purpose electronic test measurement equipment for maintenance of Van de Graaff and associated equipment and for maintenance of other facility systems. (safety system, dosimeters, etc.)

- High vacuum pumping stations, controllers, monitors and test chambers, for each of the three accelerators. Include helium cryrogenic, mercury diffusion and turbo molecular main pumps.

NOTE: THE FOLLOWING SYSTEM IS NOT BEING USED AND WILL BE TAKEN OUT WHEN THE NEW SOURCES ARE INSTALLED
AECL Gammacell. (Approx. 1400 Rads/min.) This is a small self-contained 60 Co gamma-irradiation unit for high-dose-rate irradiation. It is used for to irradiate of integrated circuits, perform soil sterilization, and perform dose rate-dependence experiments.

Contract NAS5-99124

Task#: 377

MILESTONES/DELIVERABLES AND DATES:

Radiation Tests:

1. C0-60 experiments on step wise irradiation and linears 1/30/01,5/30/01
2. Support NASA Langley Research Center, with Co-60 and electron testing for GIFTS (Geostationary Imaging Fourier Transform Spectrometer Electronics Systems).....11/30/00, 12/31/00
3. Calibration of flight instrumentation for GOES N.....1/3/01
4. Electron damage of solar cells for NRL.....One day/week, 10/4/00 thru11/22/00
5. Proton testing of prototype particle detectors for Code 692.....2/7/01
6. Proton irradiation's for Cosmic Ices, Code 691.....One day/week
7. Post flight proton damage CHANDRA..... 12/4/00
8. Alpha screening for SEU effects in project proposed hardware..... Monthly
9. Co-60 testing, research, long slow dose.....Monthly
10. Electron/X-Ray interaction in shielding materials, physical sciences.....11/13/00,12/11/00
11. Particle detector test and cal., physical sciences..... 3/5/01

Administrative:

1. Conduct Nuclear Regulatory Commission required survey, re-certify Co-60 irradiator operators, review operational and safety procedures, review records and logs, report status.....1/30/01
2. Update and maintain NRC files and records, ...Monthly, 15th of month
3. Log in results of NRC tests on Co-60 Irradiator Safety System.....Weekly, each Friday
4. Update and maintain ISO 9000 files and records.....Monthly, 1st of month
5. Technical Progress Report.....Weekly

Equipment Set-up, Calibration, Maintenance and Repair:

1. Set-up all required equipment, checkout and calibrate before each test is to begin..... See Radiation Tests Schedule
2. Review, calibrate, assure all equipment on ISO list.....Monthly, 1st of the month
3. Carry out maintenance on lab equipment.....Bi-Monthly, 2nd and 4th week
4. Repair lab equipment; see list.....Bi-Monthly, 1st and 3rd week

Contract NAS5-99124

Task#: 377

PERFORMANCE SPECIFICATIONS:

Documentation and Log Keeping:
Performance will be based on thoroughness and completeness of the Nuclear Regulatory Commission, ISO 9000, State of Maryland, GSFC Chemical and Radiation Safety, and GSFC Code 562 files, procedures, documents and logs.
Acceptable performance is that the content of those files, procedures, documents, and logs meets the requirements of each of the reported agencies or departments and the ATR.

Technical Progress Report: Acceptable performance is that the ATR is kept informed on a weekly basis of the status of work performed and of any issues requiring his attention.

Management:
Performance will be measured against the following metrics:
1. Accomplishment of objectives;
2. Clear incremental progress;
3. Responsiveness to issues;
4. Efficient and appropriate staffing;
5. Coordination with and good working relationship with the ATR and other related contractor efforts, if applicable.